

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A seismic survey system, comprising:

a plurality of transmitters;

a plurality of data sources positioned about an area to be surveyed, each data source, when in operation, communicating being associated with one of the transmitters that, when in operation, transmits a transmitter capable of transmitting data from the data sources;

a plurality of cells each containing a portion of the data sources and the their associated transmitters with which they communicate, one of the transmitters within each cell also serving as a gateway during operation for receiving data transmitted from the other data source transmitters within the cell and transmitting the data collected within the cell; and

a plurality of independent pathways, each independent pathway containing at least one gateway through which whereby data is may be transmitted during operation along each pathway via at least one gateway in that pathway without consolidation of data.

2. (Currently Amended) The seismic survey system of claim 1, further wherein the transmitters comprise transmitters that, in operation, wirelessly transmits transmitter capable of transmitting data comprises a transmitter capable of wirelessly transmitting data.

3. (Original) The seismic survey system of claim 1, further comprising a computing and storing center for receiving the data transmitted along each pathway.

4. (Original) The seismic survey system of claim 3, further comprising at least a pair of relay points through which the data transmitted along each independent pathway is relayed to the computing and storing center.
5. (Original) The seismic survey system of claim 1, further comprising a fixed-base facility to which the data is transmitted.
6. (Original) The seismic survey system of claim 5, further comprising a recording truck through which the data is transmitted to the fixed-base facility.
7. (Currently Amended) The seismic survey system of claim 1, wherein the transmitters comprise transmitters that, in operation, transmit ~~capable of transmitting data are capable of transmitting~~ data in an asynchronous mode.
8. (Currently Amended) The seismic survey system of claim 1, wherein the transmitters comprise transmitters that, in operation, transmit ~~capable of transmitting data are capable of transmitting~~ data in a synchronous mode.
9. (Original) The seismic survey system of claim 1, wherein the data is transmitted along each independent pathway according to frequency division multiplexing.
10. (Withdrawn) The seismic survey system of claim 1, wherein the data is transmitted along each pathway according to time division multiplexing.
11. (Original) The seismic survey system of claim 1, wherein the distance between gateways of adjacent cells is limited according to transmission licensing constraints.
12. (Original) The seismic survey system of claim 1, wherein the distance between gateways of adjacent cells is limited to improve reliability.

13. (Original) The seismic survey system of claim 1, wherein the pathways are substantially linear.

14. (Original) The seismic survey system of claim 1, wherein the cells overlap.

15. (Original) The seismic survey system of claim 1, wherein the cells are interleaved.

16. (Previously Presented) The seismic system of claim 1, wherein no gateway in a path directly receives data from more than one gateway or directly transmits data to more than one gateway.

17. (Previously Presented) The seismic survey system of claim 1, wherein at least one cell is arranged to, in addition to transmitting data from data sources in the cell, relay, in use, data received from a gateway of another cell.

18-37. (Canceled)

38. (Currently Amended) A method for use in seismic surveying, comprising:

collecting a plurality of seismic data at a plurality of seismic data sources, each data source communicating ~~being associated~~ with a transmitter that, in operation, transmits ~~capable of transmitting~~ data, the seismic data sources being organized into a plurality of cells, one of the transmitters within each cell also serving as a gateway for receiving data transmitted from ~~from~~ the other data source transmitters within the cell;

transmitting the collected seismic data over a plurality of independent pathways to a central location, each independent pathway containing at least one gateway through which ~~whereby~~ data is ~~may be~~ transmitted during operation along each pathway via the at least one gateway without consolidation of data; and

collecting the transmitted seismic data at the central location.

39. (Original) The method of claim 38, wherein transmitting the collected seismic data includes transmitting the collected seismic data using one of frequency division multiplexing and time division multiplexing.
40. (Original) The method of claim 38, wherein the cell definitions are constrained with transmission licensing constraints.
41. (Original) The method of claim 38, wherein the distance between cells is constrained to improve reliability.
42. (Original) The method of claim 38, wherein the cells overlap.
43. (Original) The method of claim 38, wherein cells are interleaved.
44. (Original) The method of claim 38, wherein defining the independent pathways include at least a pair of relay points through which the collected seismic data is transmitted to the central location.
45. (Previously Presented) The method of claim 38, wherein no gateway in a path directly receives data from more than one gateway or directly transmits data to more than one gateway.